API NUMBER: 093 25027

Within 1 mile of municipal water well? N

Liner not required for Category: C
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

located in a Hydrologically Sensitive Area.

Wellhead Protection Area?

Category of Pit: C

Oil & Gas

Horizontal Hole

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 05/12/2016
Expiration Date: 11/12/2016

PERMIT TO DRILL

PERMIT TO DRILL				
WELL LOCATION: Sec: 19 Twp: 20N Rge: 14W	County: MAJOR			
	ROM QUARTER: FROM NOR	TH FROM EAST		
	N LINES: 200	1980		
Lease Name: MCCONNELL	Well No: 19-1		Well will be 200	feet from nearest unit or lease boundary.
Operator COMANCHE RESOURCES COMPANY Name:	Т	elephone: 4057555900	ОТС	/OCC Number: 18676 0
COMANCHE RESOURCES COMPANY		NAUZ	E W MCCONNELL	
6520 N WESTERN AVE STE 300			E W. MCCONNELL	
OKLAHOMA CITY, OK 7311	6-7334		W. DOGWOOD DR.	
		PON	ND CREEK	OK 73766
Formation(s) (Permit Valid for Listed Formation Name 1 MISSISSIPPIAN 2 3 4 5 Spacing Orders: 650055	ns Only): Depth 8000 Location Exception Order	Nai 6 7 8 9 10		Depth d Density Orders:
Pending CD Numbers: 201505089			Special (Orders:
Total Depth: 14194 Ground Elevation: 1772	Surface Casi	ng: 800	Depth to base	e of Treatable Water-Bearing FM: 390
Under Federal Jurisdiction: No	Fresh Water Supp	ly Well Drilled: No		Surface Water used to Drill: No
PIT 1 INFORMATION		Approved Met	hod for disposal of Drilling Fluid	ls:
Type of Pit System: CLOSED Closed System Means Steel Pit	s			
Type of Mud System: WATER BASED			and application (REQUIRES	
Chlorides Max: 8000 Average: 5000		H. CLOSED S	SYSTEM=STEEL PITS PER O	PERATOR REQUEST
Is depth to top of ground water greater than 10ft below base of pi	t? Y			

HORIZONTAL HOLE 1

MAJOR Sec 19 Twp 20N Rge 14W County Spot Location of End Point: S2 S2 SW SE Feet From: SOUTH 1/4 Section Line: 135 Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 7800
Radius of Turn: 922
Direction: 180
Total Length: 4945

Measured Total Depth: 14194

True Vertical Depth: 9627

End Point Location from Lease,
Unit, or Property Line: 135

Notes:

Category Description

DEEP SURFACE CASING 5/11/2016 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 5/11/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC

FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS

DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME

COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

INTERMEDIATE CASING 5/11/2016 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

PENDING CD - 201505089 5/12/2016 - G60 - (I.O.) 19-20N-14W

X650055 MSSP

SHL NCT 150' FNL, NCT 300' FEL

COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 300' FEL

NO OP. NAMED REC. 1-26-16 (CATES)

SPACING - 650055 5/12/2016 - G60 - (640)(HOR) 19-20N-14W

EST MSSP, OTHER COMPL. INT. NCT 660' FB

(COEXIST WITH SP. ORDER 147653 CRLM, MSSLM)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS MAJOR County, Oklahoma

20N Range 14W I.M. API: 093-25027 200'FNL - 1980'FEL 19 Section _ _ Township 200 X= 1783358 Y= 438504 X= 1785979 Y= 438507 X= 1780891 Y= 438501 642 1980 LOT 1 E/2-NW/4 LOT 2 X= 1780881 Y= 435875 X= 1785972 Y= 435880 19 11 PROPOSED BOTTOM HOLE BOTTOM HOLE 135'FSL-1980'FEL NAD-27 (US Feet) 36'11'18.0" N 98'43'55.3" W 36.188342547' N 98.732030217' W X=1783982 DRILL LOT 3 -N−5 E/2-SW/4 1959 2496 LOT 4 657 1980 X= 1785961 Y= 433245 GRID NAD-27 OK NORTH US Feet 135 Scale: 1"= 1000' NOTE: The information shown herein is for BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. construction purposes ONLY, Operator: COMANCHE RESOURCES CO. **ELEVATION:** Well No.: 19-1H Lease Name: MCCONNELL 1772' Gr. at Stake Topography & Vegetation Loc. fell in rolling sandy pasture Reference Stakes or Alternate Location Stakes Set None Good Drill Site? _____ From North off county road Best Accessibility to Location _ Distance & Direction From Chester, OK, go ± 11.0 mi. East, then ± 1.0 mi. South to from Hwy Jct or Town _ the NE Cor. of Sec. 19-T20N-R14W Date of Drawing: May 05, 2016 ESSIONAL Invoice # 260199 Date Staked: May 04, 2016 AC

DATUM: NAD-27
LAT: 36'12'06.7"N
LONG: 98'43'55.6"W
LAT: 36.201865978' N
LONG: 98.732102099' W
STATE PLANE
COORDINATES: (US Feet)
TONE: OK NORTH
X: 1783998
Y: 438305

CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein

Mome L. Navel Oklahoma Lic. No. 1433

